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APPLICATION NO.	· FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,658	01/31/2002 .	Mark Philip D'Evelyn	121655	1463
6147	7590 02/25/2005		EXAMINER	
GENERAL ELECTRIC COMPANY GLOBAL RESEARCH			LEUNG, JENNIFER A	
PATENT DOCKET RM. BLDG. K1-4A59			ART UNIT	PAPER NUMBER
NISKAYUNA, NY 12309			1764	

DATE MAILED: 02/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

				(<i>U</i>)		
		Application No.	Applicant(s)			
Office Action Summary		09/683,658	D'EVELYN ET	AL.		
		Examiner	Art Unit			
		Jennifer A. Leung		·		
Period fo	The MAILING DATE of this communor Reply	ication appears on the cover	sheet with the correspondence	address		
THE - Exte after - If the - If NO - Failu Any	ORTENED STATUTORY PERIOD F MAILING DATE OF THIS COMMUN nsions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this com period for reply specified above is less than thirty (3 period for reply is specified above, the maximum so tre to reply within the set or extended period for reply reply received by the Office later than three months ed patent term adjustment. See 37 CFR 1.704(b).	ICATION. s of 37 CFR 1.136(a). In no event, howe nunication. BO) days, a reply within the statutory min atutory period will apply and will expire so will, by statute, cause the application to	ver, may a reply be timely filed mum of thirty (30) days will be considered ti SIX (6) MONTHS from the mailing date of thi become ABANDONED (35 U.S.C. § 133).	mely. s communication.		
Status						
1)	Responsive to communication(s) file	ed on .				
2a)□	This action is FINAL . 2b)⊠ This action is non-final.					
3)□	, 					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposit	ion of Claims					
5) 6) 7)	Claim(s) 1-103 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) is/are rejected. Claim(s) is/are objected to. Claim(s) 1-103 are subject to restriction and/or election requirement.					
Applicat	ion Papers					
		e Evaminer	•			
9)☐ The specification is objected to by the Examiner. 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
,	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11)	The oath or declaration is objected t			` '		
Priority ι	under 35 U.S.C. § 119		•			
	Acknowledgment is made of a claim All b) Some * c) None of: 1. Certified copies of the priority 2. Certified copies of the priority 3. Copies of the certified copies application from the Internation	documents have been rece documents have been rece of the priority documents ha	ved. ved in Application No ve been received in this Nation	ıal Stage		
* \$	See the attached detailed Office action	on for a list of the certified co	pies not received.			
Attachmen	t(s)					
1) 🔯 Notic	e of References Cited (PTO-892)	4)	nterview Summary (PTO-413)			
3) 🔲 Inforr	e of Draftsperson's Patent Drawing Review (F mation Disclosure Statement(s) (PTO-1449 or r No(s)/Mail Date	PTO/SB/08) 5)	Paper No(s)/Mail Date Notice of Informal Patent Application (F Other:	'TO-152)		

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 1-93, drawn to a pressure vessel comprising a capsule, classified in class
 422, subclass 242.
- II. Claims 94-101, drawn to a method of using a pressure vessel to process at least one material at high temperature and high pressure in the presence of a supercritical fluid, classified in class 117, subclass 11.
- III. Claims 102 and 103, drawn to a metal nitride single crystal, classified in class117, subclass 952.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the apparatus as claimed can be used to practice another and materially different process, such as the processing of materials using a pressure vessel in the absence of a supercritical fluid, as evidenced by U.S. Patent No. 2,947,609 to Strong.

Inventions I and III are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and

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materially different apparatus (MPEP § 806.05(g)). In this case, the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product, such as a synthetic diamond product from a carbonaceous material, as evidenced by U.S. Patent No. 2,947,609 to Strong.

Inventions II and III are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process, such as the process for producing single crystals of aluminum nitride at or near atmospheric pressures, as taught by U.S. Patent No. 3,607,014 to Humi.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, their recognized divergent subject matter, the search required for Group I not required for Group II or III, the search required for Group II not required for Group II not required for Group II not required for Group II or III, and the search required for Group II not required for Group II or III, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

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application. Any amendment of inventorship must be accompanied by a request under 37 CFR

1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jennifer A. Leung whose telephone number is (571) 272-1449.

The examiner can normally be reached on 8:30 am - 5:30 pm M-F, every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jennifer A. Leung

February 23, 2005

then I can

PRIMARY EXAMINER